



**STATE OF TENNESSEE
DEPARTMENT OF HEALTH
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL
Lab Services - Jackson Regional Lab
Jackson, TN 38301
731-426-0686

TDH: Lab Services KRL
Lab Services - Knoxville Regional Lab
Knoxville, TN 37920
865-549-5201

TDH: Lab Services NCL
Lab Services - Nashville Central Lab
Nashville, TN 37243
615-262-6300

Sent To: Greg Denton
TDEC-WPC
6th Floor, L & C Tower Annex
401 Church Street
Nashville, TN 37243-1534

Michael Atchley
TDEC-WPC
Knoxville FO
3711 Middlebrook Pike
Knoxville, TN 37921

Lab ID: K00002097
Knoxville Regional Laboratory

Sampling Agency: TDEC: Division of Water Pollution Control

Billing Code: 327.34-20

This is to certify that the following results were determined using
good laboratory practices and in accordance with federal or state
approved methodologies.


Analytical Supervisor

Lab-Sample Number: K00002097001
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 4.0
Sampler Project Name: TVA-Ash Spill
Project Site No.: 1
Station No.: EMORY004.0RO
Date/Time Collected: 01/13/2009 10:00
Sampler's Name: Larry Everett
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 01/20/2009
Date/Time Received: 01/13/2009 13:00
Received By: Ken Hitchman

Field Determinations
pH: 6.96 pH Units
Chlorine, residual:
Conductivity: 41 uMHO
Temperature: 6.52
Dissolved Oxygen: 11.86 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	14	mg/L	3.8	10	S Burchfield	1/15/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	14	mg/L	0.7	1	M Chen	1/15/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	S Burchfield	1/14/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	S Burchfield	1/14/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002097002
Project Name: TVA-Ash Spill
Sample Description: Emory River Mile 2.1
Sampler Project Name: TVA-Ash Spill
Project Site No.: 2
Station No.: EMORY002.1RO
Date/Time Collected: 01/13/2009 10:20
Sampler's Name: Larry Everett
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 01/20/2009
Date/Time Received: 01/13/2009 13:00
Received By: Ken Hitchman

Field Determinations
pH: 7.95 pH Units
Chlorine, residual:
Conductivity: 90 uMHO
Temperature: 4.28
Dissolved Oxygen: 11.92 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	26	mg/L	3.8	10	S Burchfield	1/15/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	26	mg/L	0.7	1	M Chen	1/15/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	0.1	ml/L	0.10	0.10	S Burchfield	1/14/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	48	mg/L	10	10	S Burchfield	1/14/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: K00002097003
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.7
Sampler Project Name: TVA-Ash Spill
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 01/13/2009 10:45
Sampler's Name: Larry Everett
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 01/20/2009
Date/Time Received: 01/13/2009 13:00
Received By: Ken Hitchman

Field Determinations
pH: 7.31 pH Units
Chlorine, residual:
Conductivity: 39 uMHO
Temperature: 6.51
Dissolved Oxygen: 9.60 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	13	mg/L	3.8	10	S Burchfield	1/15/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	13	mg/L	0.7	1	M Chen	1/15/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	0.1	ml/L	0.10	0.10	S Burchfield	1/14/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	S Burchfield	1/14/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002097004
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 0.1
Sampler Project Name: TVA-Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 01/13/2009 11:00
Sampler's Name: Larry Everett
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 01/20/2009
Date/Time Received: 01/13/2009 13:00
Received By: Ken Hitchman

Field Determinations
pH: 7.15 pH Units
Chlorine, residual:
Conductivity: 39 uMHO
Temperature: 6.52
Dissolved Oxygen: 8.98 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	12	mg/L	3.8	10	S Burchfield	1/15/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	12	mg/L	0.7	1	M Chen	1/15/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	S Burchfield	1/14/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	S Burchfield	1/14/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002097005
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3 near Hwy 70 bridge
Sampler Project Name: TVA-Ash Spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 01/13/2009 11:15
Sampler's Name: Larry Everett
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 01/20/2009
Date/Time Received: 01/13/2009 13:00
Received By: Ken Hitchman

Field Determinations
pH: 7.57 pH Units
Chlorine, residual:
Conductivity: 142 uMHO
Temperature: 9.81
Dissolved Oxygen: 10.85 mg/L
Other: TDS 0.135
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	79	mg/L	3.8	10	S Burchfield	1/15/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	64	mg/L	0.7	1	M Chen	1/15/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	0.1	ml/L	0.10	0.10	S Burchfield	1/14/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	S Burchfield	1/14/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected



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3711 Middlebrook Pike
Knoxville, TN 37921

Lab ID: K00002097
Knoxville Regional Laboratory

Sampling Agency: TDEC: Division of Water Pollution Control

Billing Code: 327.34-20

This is to certify that the following results were determined using
good laboratory practices and in accordance with federal or state
approved methodologies.

Analytical Supervisor

Lab-Sample Number: K00002097001
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 4.0
Sampler Project Name: TVA-Ash Spill
Project Site No.: 1
Station No.: EMORY004.0RO
Date/Time Collected: 01/13/2009 10:00
Sampler's Name: Larry Everett
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 01/20/2009
Date/Time Received: 01/13/2009 13:00
Received By: Ken Hitchman

Field Determinations
pH: 6.96 pH Units
Chlorine, residual:
Conductivity: 41 uMHO
Temperature: 6.52
Dissolved Oxygen: 11.86 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	01/15/2009				M Pattanayek	1/15/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	360	µg/L	2.9	10	A Bass	1/16/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	430	µg/L	32.0	50	M Pattanayek	1/15/2009
Antimony	0.44J	µg/L	0.33	1	M Pattanayek	1/15/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	1/15/2009
Barium	26	µg/L	2.5	5	M Pattanayek	1/15/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	1/15/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	1/15/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	1/15/2009
Cobalt	0.33J	µg/L	0.04	1	M Pattanayek	1/15/2009
Copper	1.4	µg/L	0.38	1	M Pattanayek	1/15/2009
Lead	0.46J	µg/L	0.10	1	M Pattanayek	1/15/2009
Manganese	36	µg/L	0.42	1	M Pattanayek	1/15/2009
Nickel	1.2	µg/L	0.25	1	M Pattanayek	1/15/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	1/15/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	1/15/2009
Thallium	U	µg/L	0.03	1	M Pattanayek	1/15/2009
Vanadium	8.3	µg/L	3.4	5	M Pattanayek	1/15/2009
Zinc	4.6J	µg/L	1.9	5	M Pattanayek	1/15/2009

Lab-Sample Number: K00002097001
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 4.0
Sampler Project Name: TVA-Ash Spill
Project Site No.: 1
Station No.: EMORY004.0RO
Date/Time Collected: 01/13/2009 10:00
Sampler's Name: Larry Everett
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327-34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 01/20/2009
Date/Time Received: 01/13/2009 13:00
Received By: Ken Hitchman

Field Determinations
pH: 6.96 pH Units
Chlorine, residual:
Conductivity: 41 uMHO
Temperature: 6.52
Dissolved Oxygen: 11.86 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.13	0.2	A Wilson	1/15/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002097002
Project Name: TVA-Ash Spill
Sample Description: Emory River Mile 2.1
Sampler Project Name: TVA-Ash Spill
Project Site No.: 2
Station No.: EMORY002.1RO
Date/Time Collected: 01/13/2009 10:20
Sampler's Name: Larry Everett
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 01/20/2009
Date/Time Received: 01/13/2009 13:00
Received By: Ken Hitchman

Field Determinations
pH: 7.95 pH Units
Chlorine, residual:
Conductivity: 90 uMHO
Temperature: 4.28
Dissolved Oxygen: 11.92 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	01/15/2009				M Pattanayek	1/15/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	410	µg/L	2.9	10	A Bass	1/16/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	790	µg/L	32.0	50	M Pattanayek	1/15/2009
Antimony	0.83J	µg/L	0.33	1	M Pattanayek	1/15/2009
Arsenic	14	µg/L	0.93	5	M Pattanayek	1/15/2009
Barium	56	µg/L	2.5	5	M Pattanayek	1/15/2009
Beryllium	0.17J	µg/L	0.11	1	M Pattanayek	1/15/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	1/15/2009
Chromium	2.6J	µg/L	2.0	5	M Pattanayek	1/15/2009
Cobalt	0.70J	µg/L	0.04	1	M Pattanayek	1/15/2009
Copper	2.8	µg/L	0.38	1	M Pattanayek	1/15/2009
Lead	1.1	µg/L	0.10	1	M Pattanayek	1/15/2009
Manganese	51	µg/L	0.42	1	M Pattanayek	1/15/2009
Nickel	1.9	µg/L	0.25	1	M Pattanayek	1/15/2009
Selenium	3.3J	µg/L	1.3	5	M Pattanayek	1/15/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	1/15/2009
Thallium	0.14J	µg/L	0.03	1	M Pattanayek	1/15/2009
Vanadium	16	µg/L	3.4	5	M Pattanayek	1/15/2009
Zinc	3.6J	µg/L	1.9	5	M Pattanayek	1/15/2009

Lab-Sample Number: K00002097002
Project Name: TVA-Ash Spill
Sample Description: Emory River Mile 2.1
Sampler Project Name: TVA-Ash Spill
Project Site No.: 2
Station No.: EMORY002.1RO
Date/Time Collected: 01/13/2009 10:20
Sampler's Name: Larry Everett
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 01/20/2009
Date/Time Received: 01/13/2009 13:00
Received By: Ken Hitchman

Field Determinations
pH: 7.95 pH Units
Chlorine, residual:
Conductivity: 90 uMHO
Temperature: 4.28
Dissolved Oxygen: 11.92 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.13	0.2	A Wilson	1/15/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002097003
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.7
Sampler Project Name: TVA-Ash Spill
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 01/13/2009 10:45
Sampler's Name: Larry Everett
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 01/20/2009
Date/Time Received: 01/13/2009 13:00
Received By: Ken Hitchman

Field Determinations
pH: 7.31 pH Units
Chlorine, residual:
Conductivity: 39 uMHO
Temperature: 6.51
Dissolved Oxygen: 9.60 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	01/15/2009				M Pattanayek	1/15/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	310	µg/L	2.9	10	A Bass	1/16/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	300	µg/L	12.8	20	M Pattanayek	1/15/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	1/15/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	1/15/2009
Barium	25	µg/L	2.5	5	M Pattanayek	1/15/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	1/15/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	1/15/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	1/15/2009
Cobalt	0.33J	µg/L	0.04	1	M Pattanayek	1/15/2009
Copper	0.96J	µg/L	0.38	1	M Pattanayek	1/15/2009
Lead	0.33J	µg/L	0.10	1	M Pattanayek	1/15/2009
Manganese	34	µg/L	0.42	1	M Pattanayek	1/15/2009
Nickel	1.3	µg/L	0.25	1	M Pattanayek	1/15/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	1/15/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	1/15/2009
Thallium	U	µg/L	0.03	1	M Pattanayek	1/15/2009
Vanadium	6.3	µg/L	3.4	5	M Pattanayek	1/15/2009
Zinc	3.3J	µg/L	1.9	5	M Pattanayek	1/15/2009

Lab-Sample Number: K00002097003
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.7
Sampler Project Name: TVA-Ash Spill
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 01/13/2009 10:45
Sampler's Name: Larry Everett
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 01/20/2009
Date/Time Received: 01/13/2009 13:00
Received By: Ken Hitchman

Field Determinations
pH: 7.31 pH Units
Chlorine, residual:
Conductivity: 39 uMHO
Temperature: 6.51
Dissolved Oxygen: 9.60 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.13	0.2	A Wilson	1/15/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002097004
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 0.1
Sampler Project Name: TVA-Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 01/13/2009 11:00
Sampler's Name: Larry Everett
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 01/20/2009
Date/Time Received: 01/13/2009 13:00
Received By: Ken Hitchman

Field Determinations
pH: 7.15 pH Units
Chlorine, residual:
Conductivity: 39 uMHO
Temperature: 6.52
Dissolved Oxygen: 8.98 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	01/15/2009				M Pattanayek	1/15/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	240	µg/L	2.9	10	A Bass	1/16/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	250	µg/L	12.8	20	M Pattanayek	1/15/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	1/15/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	1/15/2009
Barium	26	µg/L	2.5	5	M Pattanayek	1/15/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	1/15/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	1/15/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	1/15/2009
Cobalt	0.35J	µg/L	0.04	1	M Pattanayek	1/15/2009
Copper	0.82J	µg/L	0.38	1	M Pattanayek	1/15/2009
Lead	0.28J	µg/L	0.10	1	M Pattanayek	1/15/2009
Manganese	37	µg/L	0.42	1	M Pattanayek	1/15/2009
Nickel	1.4	µg/L	0.25	1	M Pattanayek	1/15/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	1/15/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	1/15/2009
Thallium	U	µg/L	0.03	1	M Pattanayek	1/15/2009
Vanadium	6.6	µg/L	3.4	5	M Pattanayek	1/15/2009
Zinc	3.4J	µg/L	1.9	5	M Pattanayek	1/15/2009

Lab-Sample Number: K00002097004
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 0.1
Sampler Project Name: TVA-Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 01/13/2009 11:00
Sampler's Name: Larry Everett
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 01/20/2009
Date/Time Received: 01/13/2009 13:00
Received By: Ken Hitchman

Field Determinations
pH: 7.15 pH Units
Chlorine, residual:
Conductivity: 39 uMHO
Temperature: 6.52
Dissolved Oxygen: 8.98 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.13	0.2	A Wilson	1/15/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002097005
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3 near Hwy 70 bridge
Sampler Project Name: TVA-Ash Spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 01/13/2009 11:15
Sampler's Name: Larry Everett
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327-34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 01/20/2009
Date/Time Received: 01/13/2009 13:00
Received By: Ken Hitchman

Field Determinations
pH: 7.57 pH Units
Chlorine, residual:
Conductivity: 142 uMHO
Temperature: 9.81
Dissolved Oxygen: 10.85 mg/L
Other: TDS 0.135
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	01/15/2009				M Pattanayek	1/15/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	390	µg/L	2.9	10	A Bass	1/16/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	410	µg/L	32.0	50	M Pattanayek	1/15/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	1/15/2009
Arsenic	1.1J	µg/L	0.93	5	M Pattanayek	1/15/2009
Barium	33	µg/L	2.5	5	M Pattanayek	1/15/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	1/15/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	1/15/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	1/15/2009
Cobalt	0.37J	µg/L	0.04	1	M Pattanayek	1/15/2009
Copper	2.9	µg/L	0.38	1	M Pattanayek	1/15/2009
Lead	0.70J	µg/L	0.10	1	M Pattanayek	1/15/2009
Manganese	57	µg/L	0.42	1	M Pattanayek	1/15/2009
Nickel	1.3	µg/L	0.25	1	M Pattanayek	1/15/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	1/15/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	1/15/2009
Thallium	U	µg/L	0.03	1	M Pattanayek	1/15/2009
Vanadium	5.5	µg/L	3.4	5	M Pattanayek	1/15/2009
Zinc	4.6J	µg/L	1.9	5	M Pattanayek	1/15/2009

Lab-Sample Number: K00002097005
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3 near Hwy 70 bridge
Sampler Project Name: TVA-Ash Spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 01/13/2009 11:15
Sampler's Name: Larry Everett
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 01/20/2009
Date/Time Received: 01/13/2009 13:00
Received By: Ken Hitchman

Field Determinations
pH: 7.57 pH Units
Chlorine, residual:
Conductivity: 142 uMHO
Temperature: 9.81
Dissolved Oxygen: 10.85 mg/L
Other: TDS 0.135
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.13	0.2	A Wilson	1/15/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected